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EXPLORING USER EXPERIENCE AND PREFERENCES IN DIGITAL AND TRADITIONAL MENTAL HEALTH SCREENING AT CAGAYAN STATE UNIVERSITY CARIG CAMPUS

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ABSTRACT

Mental health screening in higher education is crucial for early detection of psychological issues among students. With digital technologies increasingly used in student support, this study evaluated the effectiveness and user experience of mobile-based versus traditional paper-and-pencil mental health screenings at Cagayan State University–Carig Campus. Thirty-three students completed assessments for depression, anxiety, and stress using both methods in a quasi-experimental design. Results revealed a significant difference in depression scores between methods, indicating that the screening format influences reporting of depressive symptoms. No significant differences were found for anxiety and stress, suggesting both methods are comparable for these conditions. Students preferred the mobile-based screening, highlighting greater comfort, privacy, ease of use, and accessibility. Overall satisfaction favored the digital method. The study concludes that mobile-based screening offers a user-friendly and efficient alternative that is psychometrically similar to traditional approaches. It recommends integrating mobile screening tools into university mental health services to enhance student support and accessibility.

I. INTRODUCTION

Mental health has progressively been recognized as a critical component of overall well-being, particularly among young adults in higher education institutions who are exposed to academic pressure, social demands, and developmental transitions. Globally, depression and anxiety have been identified as leading contributors to the burden of disease, necessitating the early detection of mental health concerns through reliable screening mechanisms [1], [2]. Within academic environments, mental health screening plays a vital role in identifying students at risk and facilitating timely interventions, especially when evidence-based and psychometrically sound tools are employed [2]. However, despite the availability of validated instruments, the effectiveness of mental health screening is strongly influenced not only by measurement accuracy but also by the way assessments are administered and experienced by users.

II. THEORETICAL REFERENCE

Historically, paper-and-pencil screening tools have been the dominant method for assessing mental health concerns such as depression, anxiety, and stress. These traditional methods have demonstrated acceptable reliability and validity across diverse populations [3], [4]. Nonetheless, several studies have been raised concerns regarding their practicality, efficiency, and potential influence on response behavior. Paper-based assessments may increase respondent self-consciousness, reduce perceived privacy, and heighten evaluation anxiety, particularly when sensitive psychological information is involved [5]. Moreover, face-to-face or paper-administered survey have been shown to produce greater variability in responses for subjective indicators compared to self-administered digital formats [4], suggesting that the mode of administration itself may affect mental health screening outcomes.

Additionally, Traditional mental health assessments suffer from biased, infrequent self-reports that poorly capture daily functioning. Mobile apps and wearables provide real-time monitoring of symptoms and behavior. Yet, challenges remain in off-the-shelf tool reliability, user adoption, and clinical data use [6]. Advancements in mobile and digital technologies have led to the rapid expansion of mobile health (mHealth) solutions for mental health screening and assessment. Mobile applications have been increasingly utilized to improve accessibility, efficiency, and scalability of mental health services, particularly among populations with limited access to traditional care [7], [8]. Systematic reviews have demonstrated that mobile and web-based mental health screening tools show negligible differences in psychometric properties when compared to their paper-and-pencil counterparts, particularly for widely used instruments such as the PHQ-9, CES-D, and BDI-II [2], [9], [10].

These findings support the validity and reliability of mobile-based screening as a viable alternative to traditional assessment formats. More over, in clinics, accurate pain quantification is crucial. Electronic pain scales speed up data collection and analysis over paper methods. Smart tech in pediatric/adult pain apps could enable reliable, user-friendly assessments, enabling early detection to boost quality of life and reduce school/work absences if widely adopted [11]. There are also studies that evaluates two key aspects of mHealth apps: (1) their effectiveness in reducing maternal depression and/or anxiety symptoms during pregnancy or the first postpartum year, and (2) the quality of commercially available apps targeting perinatal depression and/or anxiety [12]

Beyond psychometric equivalence, user experience and usability have emerged as essential determinants of engagement and acceptability in digital mental health tools. Research consistently indicates that usability factors such as ease of use, interface clarity, accessibility, and efficiency significantly influence whether individuals are willing to complete and continue using mental health applications , [8]. Studies examining user reviews and expert evaluations have emphasized that poor usability, lack of personalization, and concerns regarding privacy and security are among the primary reasons for discontinuation of mental health apps , [7]. Conversely, applications that are intuitive, customizable, and transparent about data security tend to receive higher acceptability and satisfaction ratings.

Mental health is vital but underserved due to stigma and counselor shortages, limiting traditional service use. Mobile health apps offer a promising alternative, yet few studies evaluate if they truly meet user needs [13]. A systematic review that examines the increasing number of smartphone applications (apps) developed for physical and mental health. It evaluates the effectiveness of these applications in treating various mental health conditions, focusing on user-centered approaches [14] . Another study tested the usability of the PeerTECH smartphone app in community mental health via semi structured interviews, participants found it relevant for self-managing mental/physical health, offered feedback on features and Norwegian adaptations, and deemed it easy for users/peers to navigate [15].

Emotional experiences during mental health assessment have also been found to play a significant role in shaping users' perceptions of screening tools. Drawing on control-value theory and mobile learning theory, demonstrated that users' emotions toward both technology and content significantly predicted engagement and perceived learning outcomes [16]. Similarly, it was found that enjoyment was positively associated with usability, whereas boredom, frustration, and anxiety were negatively related to users' experiences with mental health assessment tools [17]. These findings underscore the importance of examining not only the technical effectiveness of screening methods but also the emotional and experiential dimensions of their use.

Comparative studies between digital and traditional assessment modalities further suggest that certain mental health constructs respond differently to administration formats. There are studies that College students endorse high rates of mental health problems. While many colleges offer on-campus services, many students who could benefit from mental health services do not receive care. Indeed, nearly half of students who screen positive for depression, for example, do not receive treatment. Digital mental health programs, such as those delivered via mobile apps, may help expand access to mental health care and resources. This mixed-methods study aims to examine the uptake and effectiveness of an implementation of IntelliCare for College Students, a self-guided app-based mental health platform, on two university campuses [18].

While anxiety and stress measures often demonstrate stability and equivalence across paper and digital platforms, depression scores appear more sensitive to contextual and experiential factors related to assessment modality [3], [5]. These modality effects reinforce the need for empirical comparisons that examine both screening outcomes and user experience simultaneously. Moreover, research on mobile assessments among youth and college students highlights that digital tools may facilitate more honest self-disclosure due to increased privacy, autonomy, and reduced fear of judgment [19], [20]. According to some studies, those with mental health conditions showed higher use of digital tools like computers and smartphones for health searches, test results, provider communication, and info sharing, even after adjusting for sociodemographics. However, privacy/security concerns made them more likely to withhold information from providers, highlighting the need for better data protection to maximize tech benefits in mental health care [21].

Recent literature has also emphasized the broader acceptability and feasibility of digital mental health interventions across diverse populations. Systematic reviews have shown that the majority of digital mental health interventions for depression and anxiety are positively accepted by users, particularly when grounded in evidence-based frameworks such as cognitive behavioral therapy [22]. Studies have further demonstrated that mobile mental health apps are best viewed as complementary tools rather than replacements for traditional mental health services, supporting early detection, monitoring, and engagement [23], [1]. Additionally, emerging evidence supports the integration of advanced technologies, including machine learning and personalized app features, to enhance screening accuracy and user relevance [24], [25].

Further, Despite the popularity of mental health apps, it is unknown if they are actually used by those with mental illness. There are studies assessed whether differences in clinic setting may influence the use of mental health apps and which factors influence patient perception of apps [26]. There are also studues that mobile mental-health trackers are mobile phone apps that gather self-reported mental-health ratings from users. They have received great attention from clinicians as tools to screen for depression in individual patients. While several apps that ask simple questions using face emoticons have been developed, there has been no study examining the validity of their screening performance [27]. Despite the growing body of international literature, there remains a scarcity of empirical studies examining mental health screening modalities within Philippine higher education institutions, particularly state universities.

Given the increasing reliance on digital platforms among Filipino college students, it is essential to evaluate whether mobile-based mental health screening can enhance efficiency, accuracy, and user preference while maintaining psychometric integrity. Thus, this study aimed to compare the effectiveness and user experience of mobile-based mental health screening with the traditional paper-and-pencil method among college students. Specifically, it sought to determine whether the use of a mobile application enhanced efficiency, accuracy, and user preference when completing a standard mental health screening tool. By integrating outcome-based and experience-based evaluation, this study intended to contribute evidence that may guide the adoption of student-centered, technology-supported mental health screening practices in higher education.

III. MATERIALS AND METHODS

III.1 RESEARCH DESIGN

This study employed a quasi-experimental research design to examine and compare the mental health screening results and user preferences of college students when administered through mobile application–based and paper-and-pencil screening methods. The quasi-experimental design was deemed appropriate because the study involved the comparison of two screening modalities without random assignment of participants to independent groups. Instead, the same group of respondents underwent both screening methods, allowing for within-subject comparison of mental health outcomes and preferences. This design enabled the researchers to determine differences between screening methods while maintaining ethical and practical feasibility within an academic setting.

III.2 RESEARCH PARTICIPANTS

The participants of the study consisted of thirty-three (33) college students currently enrolled at Cagayan State University–Carig Campus. The respondents were selected using a purposive sampling technique, as participation was based on willingness and eligibility to complete both mobile and paper-and-pencil mental health screening tools. All participants were officially enrolled during the conduct of the study and voluntarily agreed to take part after being informed of the study's objectives, procedures, and ethical considerations. The sample size was considered sufficient for within-subject comparison using nonparametric and paired statistical analyses.

III.3 DATA DESCRIPTION

The data collected in this study included respondents' mental health screening results and their preferences regarding the screening methods used. Mental health data covered three dimensions: depression, anxiety, and stress, classified into categorical levels such as normal, mild, moderate, severe, and extremely severe based on the scoring guidelines of the screening instruments. Preference data were gathered using a structured questionnaire measuring students' perceptions of ease of use and efficiency, accessibility, comfort and privacy, and overall satisfaction and preference for each screening method. All responses were quantified using Likert-scale ratings and numerical scores to facilitate statistical analysis.

III.4 RESEARCH PROCEDURES

Prior to data collection, permission to conduct the study was secured from the appropriate university authorities. The respondents were then oriented regarding the purpose of the study, the procedures involved, and their rights as participants, including confidentiality and voluntary participation. Informed consent was obtained from all respondents. The participants were first asked to complete the mental health screening using one method, followed by the alternative method, ensuring that all respondents experienced both the mobile application and paper-and-pencil screening tools. After completing both screenings, the respondents answered the preference questionnaire evaluating their experiences with each method. All data were collected within a controlled timeframe to ensure consistency in administration.

III.5 DATA ANALYSIS

The collected data were analyzed using appropriate descriptive and inferential statistical tools. Frequency counts and percentages were used to describe the levels of depression, anxiety, and stress obtained from both screening methods. Weighted means were computed to determine the level of students' preference for each screening modality. To determine significant differences in mental health screening results between the mobile and paper-and-pencil methods, the Wilcoxon Signed Ranks Test was employed. Meanwhile, paired samples t-tests were used to examine significant differences in students' preferences across the different dimensions. All statistical analyses were conducted at a 0.05 level of significance.

IV. RESULTS AND DISCUSSIONS

IV.1 LEVEL OF MENTAL HEALTH RESULTS USING MOBILE APPLICATION AND PAPER-AND-PENCIL METHOD SCREENING TOOL

IV.1.1 Level of Mental Health Results using Mobile Application Screening Tool

The Table 1 shows that the largest proportion of respondents assessed through the mobile application reported moderate depression (36.40%), followed by mild depression (30.30%), while smaller proportions fell under severe (18.20%), normal (9.10%), and extremely severe (6.10%) levels. This distribution suggests that the mobile screening tool was sensitive in detecting varying degrees of depressive symptoms among college students, particularly within the mild-to-moderate range. Such findings are consistent with studies indicating that mobile-based mental health screening tools are effective in capturing subclinical and moderate depressive symptoms due to their perceived privacy, reduced social desirability bias, and ease of self-disclosure [2], [9].

Moreover, previous literature emphasizes that digital screening environments encourage more honest responses among young adults, thereby improving the detection of emotional distress that might otherwise remain underreported in traditional settings [23], [17].

Table 1: Frequency and Percentage Distribution of Respondents' Level of Mental Health Results using mobile application screening tool along Depression.

Level	Frequency	Percent
Extremely Severe	2	6.10
Severe	6	18.20
Moderate	12	36.40
Mild	10	30.30
Normal	3	9.10
Total	33	100.00

Source: Authors, (2026).

The Table 2 displays that extremely severe anxiety (33.30%) constituted the highest proportion of respondents, followed by moderate (24.20%) and severe anxiety (24.20%), while fewer respondents fell under normal (12.10%) and mild (6.10%) categories. This pattern indicates a substantial burden of anxiety symptoms among college students when screened using a mobile application. The heightened detection of severe anxiety aligns with existing research suggesting that mobile mental health tools enhance symptom recognition by allowing respondents to complete assessments in non-threatening, familiar environments, which may intensify self-awareness of anxiety-related symptoms [28], [22]. Furthermore, mobile platforms have been found particularly effective in identifying anxiety symptoms due to their immediacy, anonymity, and reduced fear of judgment, especially among student populations [7], [19].

Table 2: Frequency and Percentage Distribution of Respondents' Level of Mental Health Results using mobile application screening tool along Anxiety.

Level	Frequency	Percent
Extremely Severe	11	33.30
Severe	8	24.20
Moderate	8	24.20
Mild	2	6.10
Normal	4	12.10
Total	33	100.00

Source: Authors, (2026).

The Table 3 shows that more than half of the respondents were classified as normal (54.50%) in terms of stress levels, while severe stress (18.20%), mild stress (15.20%), and moderate stress (12.10%) accounted for the remaining distribution. This finding suggests that while stress is present among college students, a majority experience manageable stress levels when assessed through a mobile screening tool. The results are supported by literature indicating that mobile assessments can accurately capture stress patterns by enabling real-time or reflective self-reporting, which improves recall accuracy and contextual relevance [1], [8]. Additionally, mobile tools have been shown to normalize the screening experience, potentially reducing stress amplification during assessment compared to traditional paper-based methods [5].

Table 3: Frequency and Percentage Distribution of Respondents' Level of Mental Health Results using mobile application screening tool along Stress.

Level	Frequency	Percent
Severe	6	18.20
Moderate	4	12.10
Mild	5	15.20
Normal	18	54.50
Total	33	100.00

Source: Authors, (2026).

IV.1.2 Level of Mental Health Results using Paper-And-Pencil Method Screening Tool

The Table 4 reveals that respondents assessed using the paper-and-pencil method were more frequently classified under extremely severe depression (21.20%), with mild (24.20%) and moderate depression (24.20%) showing equal proportions, followed by severe (18.20%) and normal (12.10%) levels. Compared to mobile screening results, the paper-based method appears to yield a higher proportion of extreme depression classifications. This aligns with prior research indicating that traditional formats may increase response caution or overreporting due to perceived formality and test-like conditions [3], [4]. Additionally, paper-based assessments may heighten respondent self-monitoring, potentially influencing symptom severity ratings among students [5].

Table 4: Frequency and Percentage Distribution of Respondents' Level of Mental Health Results using paper-and-pencil method screening tool along Depression.

Level	Frequency	Percent
Extremely Severe	7	21.20
Severe	6	18.20
Moderate	8	24.20
Mild	8	24.20
Normal	4	12.10
Total	33	100.00

Source: Authors, (2026).

The Table 5 shows that nearly half of the respondents were classified as having extremely severe anxiety (48.50%), while moderate anxiety (30.30%) also accounted for a substantial portion, with minimal representation in mild (3.00%) and severe (6.10%) categories. This concentration of extreme anxiety scores suggests that paper-and-pencil assessments may intensify symptom endorsement, possibly due to reduced perceived privacy and increased performance anxiety during completion. Previous studies indicate that traditional assessment formats may inadvertently elevate reported anxiety levels, particularly when respondents feel observed or constrained by time and setting [3], [17]. Such findings reinforce the importance of considering modality effects when interpreting anxiety screening results [4].

Table 5: Frequency and Percentage Distribution of Respondents' Level of Mental Health Results using paper-and-pencil method screening tool along Anxiety.

Level	Frequency	Percent
Extremely Severe	16	48.50
Severe	2	6.10
Moderate	10	30.30
Mild	1	3.00
Normal	4	12.10
Total	33	100.00

Source: Authors, (2026).

The Table 6 indicates that most respondents were classified as normal (51.50%) in stress levels, followed by severe stress (21.20%), while mild and moderate stress both accounted for 12.10% each, and extremely severe stress (3.0%) was minimal. This distribution closely mirrors mobile-based stress results, suggesting relative equivalence between formats in stress detection. Literature supports this comparability, noting that stress, as a more situational and less stigmatized construct, tends to yield consistent results across administration modes [2], [5]. This reinforces findings that paper and digital formats are largely interchangeable for stress screening when validated tools are used [10].

Table 6: Frequency and Percentage Distribution of Respondents' Level of Mental Health Results using paper-and-pencil method screening tool along Stress.

Level	Frequency	Percent
Extremely Severe	1	3.0
Severe	7	21.2
Moderate	4	12.1
Mild	4	12.1
Normal	17	51.5
Total	33	100.0

Source: Authors, (2026).

IV.2 LEVEL OF STUDENTS' PREFERENCE FOR EACH SCREENING TOOL

The Table 7 shows that students expressed a strongly positive preference for the mobile screening method, as reflected by an overall weighted mean of 4.34 (Strongly Agree), with consistently high ratings across ease of use, accessibility, comfort and privacy, and overall satisfaction. Notably, comfort and privacy yielded the highest category mean (4.49), indicating that students felt more relaxed, less judged, and more confident about data security when using mobile screening tools. These findings are strongly supported by literature emphasizing that mobile mental health applications enhance user comfort, perceived confidentiality, and engagement, which are critical factors in screening adherence among young adults [28], [22], [20]. The preference for mobile screening reflects broader trends in digital mental health acceptance within student populations [29].

Table 7: Level of students' preference using mobile screening method.

Dimensions	Statements	Mean	Descriptive interpretation
Ease of Use and Efficiency	1. I found the process of completing the screening to be easy to understand and follow. "	4.21	Strongly Agree
	2. I found the method easy to use and intuitive	4.12	Agree
	3. The screening process is completed within a reasonable amount of time	4.12	Agree
	4. I can finish the screening without feeling rushed or overwhelmed	4.30	Strongly Agree
	Category Mean	**4.19**	**Agree**
Accesibility	5. The method felt free of technical issues or unnecessary hurdles "	3.79	Agree
	6. Completing the screening using this method felt convenient for my schedule	4.33	Strongly Agree
	7. I would be able to easily access this screening method whenever I needed it	4.30	Strongly Agree
	8. The instructions and layout were clear regardless of where I completed the screening	4.39	Strongly Agree
	Category Mean	**4.20**	**Strongly Agree**
Comfort and Privacy	9. I felt comfortable and relaxed while using this method to answer the questions "	4.48	Strongly Agree
	10. I felt confident that my answers were private and secure using this method	4.55	Strongly Agree
	11. This method made it easy to concentrate on the questions without distraction	4.33	Strongly Agree
	12. Using the the method makes me feel less judged	4.61	Strongly Agree
	Category Mean	4.49	Strongly Agree
Overall Satisfaction and Preference	14. Given the choice, I would prefer to use this method over the alternative for future screenings?	4.39	Strongly Agree
	15. I would recommend this app to other students for mental health screening	4.58	Strongly Agree
	Category Mean	**4.46**	**Strongly Agree**
	Overall Weighted Mean	**4.34**	**Strongly Agree**

Source: Authors, (2026).

The Table 8 indicates that students demonstrated a neutral overall preference toward the paper-and-pencil method, with an overall weighted mean of 3.38, and particularly low ratings in comfort and privacy as well as overall satisfaction. While ease of use and accessibility were rated as agreeable, concerns regarding privacy, feeling judged, and convenience was evident. These results align with prior research suggesting that traditional screening formats are perceived as less private and less flexible, which may reduce user engagement and satisfaction, especially among digitally literate college students [4], [17]. The neutral preference suggests that while paper-based tools remain functional, they may no longer align with students' expectations for autonomy, confidentiality, and convenience [8].

Table 8: Level of students' preference using Written Preference/ paper-and-pencil screening method.

Dimensions	Statements	Mean	Descriptive Interpretation
Ease of Use and Efficiency	1. I found the process of completing the screening to be easy to understand and follow. "	4.03	Agree
	2. I found the method easy to use and intuitive	3.70	Agree
	3. The screening process is completed within a reasonable amount of time	3.76	Agree
	4. I can finish the screening without feeling rushed or overwhelmed	3.27	Neutral
	Category Mean	**3.69**	**Agree**
Accessibility	5. The method felt free of technical issues or unnecessary hurdles "	3.55	Agree
	6. Completing the screening using this method felt convenient for my schedule	3.18	Neutral
	7. I would be able to easily access this screening method whenever I needed it	3.21	Neutral

	8. The instructions and layout were clear regardless of where I completed the screening	3.79	Agree
	Category Mean	**3.43**	**Agree**
Comfort and Privacy	9. I felt comfortable and relaxed while using this method to answer the questions "	3.85	Agree
	10. I felt confident that my answers were private and secure using this method	2.88	Neutral
	11. This method made it easy to concentrate on the questions without distraction	3.42	Agree
	12. Using the the method makes me feel less judged	2.61	Neutral
	Category Mean	**3.19**	**Neutral**
Overall Satisfaction and Preference	14. Given the choice, I would prefer to use this method over the mobile application for future screenings?	2.97	Neutral
	15. I would recommend this app to other students for mental health screening	3.12	Neutral
	Category Mean	3.19	Neutral
	Overall Weighted Mean	**3.38**	**Neutral**

Source: Authors, (2026).

The Table 9 shows a statistically significant difference in depression scores between mobile and paper-based screening methods (p = .048), while no significant differences were found for anxiety (p = .272) and stress (p = .167). This indicates that the mode of administration influenced depression screening outcomes but not anxiety or stress results. Such findings are consistent with literature suggesting that depressive symptoms are more sensitive to contextual and emotional factors related to assessment modality, particularly privacy and perceived judgment [17], [9]. The absence of significant differences in anxiety and stress supports previous evidence that these constructs demonstrate greater measurement equivalence across formats [2], [5].

Table 9: Significant difference in the mental health screening results of students when administered between methods.

Ranks				
		N	**Mean Rank**	**Sum of ranks**
Depression-Traditional - Depression-APP	Negative Ranks	3[a]	5.00	15.00
	Positive Ranks	9[b]	7.00	63.00
	Ties	21[c]		
	Total	33		
Anxiety-Traditional - Anxiety-APP	Negative Ranks	3[d]	3.50	10.50
	Positive Ranks	5[e]	5.10	25.50
	Ties	25[f]		
	Total	33		
Stress-Traditional - Stress-APP	Negative Ranks	2[g]	2.00	4.00
	Positive Ranks	4[h]	4.25	17.00
	Ties	27[i]		
	Total	33		

TEST STATISTICS[a]		
Depression-Traditional - Depression-APP	Anxiety-Traditional - Anxiety-APP	Stress-Traditional - Stress-APP
-1.977[b]	-1.098[b]	-1.382[b]
.048	.272	.167
a. Wilcoxon Signed Ranks Test		
b. Based on negative ranks.		

Source: Authors, (2026).

The Table 10 reveals statistically significant differences across all preference dimensions, with students consistently favoring the mobile screening method over the paper-based approach, as evidenced by significant p-values (.003 to .000). The largest mean difference was observed in comfort and privacy, underscoring the importance of emotional experience in screening modality preference. These findings strongly align with existing research highlighting that mobile mental health tools outperform traditional methods in usability, acceptability, and user satisfaction, particularly among young adults [23], [22],[17]. The results affirm that user-centered design and digital delivery play a critical role in shaping student engagement with mental health screening tools [30].

Table 10: Significant difference in student preference between the mobile and paper-based screening methods.

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	ease of use and efficiency-Written - ease of use and efficiency-Mobile	-.50000	.89049	.15501	-.81575	-.18425	-3.226	32	.003
Pair 2	accessibility-Written - accessibility-Mobile	-.77273	.84401	.14692	-1.07200	-.47345	-5.259	32	.000
Pair 3	comfort or privacy-Wtitten - comfort or privacy-mobile	-1.30303	.69529	.12103	-1.54957	-1.05649	-10.766	32	.000
Pair 4	overall satisfaction-Written - overall satisfaction-mobile	-1.272727272727273	.910793859523358	.158548860124669	-1.595680732482766	-.949773812971779	-8.027	32	.000
Pair 5	Ovearll Weighted Mean -Written - Ovearll Weighted Mean -mobile	-.962121212121213	.637812562636405	.111028915842842	-1.188279712889697	-.735962711352728	-8.666	32	.000

Source: Authors, (2026).

V. CONCLUSIONS

The mental health screening results of college students differ depending on the method of administration, particularly in the assessment of depressive symptoms. As a whole, a significant difference was established in depression scores between the mobile application and paper-and-pencil screening methods, indicating that the mode of screening influences how students report depressive experiences. This finding serves as evidence that digital screening environments may facilitate greater openness and self-disclosure among students due to enhanced perceptions of privacy, comfort, and reduced judgment. On the other hand, no significant differences were found in anxiety and stress results between the two screening methods, suggesting that these constructs remain relatively stable across digital and traditional modalities and that both methods are psychometrically viable for their assessment.Moreover, the study clearly demonstrates that students show a significantly stronger preference for the mobile screening method across all dimensions, including ease of use, accessibility, comfort and privacy, and overall satisfaction.

This indicates that mobile-based mental health screening aligns more closely with the needs, expectations, and behavioral patterns of contemporary college students. The high level of acceptability toward the mobile method reflects the importance of user experience in mental health assessment and highlights the potential of digital tools to increase participation, engagement, and willingness to undergo mental health screening within the university setting.On a practical note, the findings of this study provide important implications for Cagayan State University–Carig Campus in strengthening its mental health support services. The results may serve as a basis for integrating mobile mental health screening tools as a complementary mechanism to existing paper-based assessments, particularly for early detection and routine mental health monitoring among students. The evidence generated by this study may also guide university administrators, guidance counselors, and mental health practitioners in designing more student-centered, accessible, and acceptable screening programs that encourage proactive help-seeking behavior.

However, the study has certain limitations that must be acknowledged. First, the respondents were limited to a relatively small sample from a single campus, which may restrict the generalizability of the findings. Future researchers are encouraged to include larger samples and multiple campuses to provide a more comprehensive understanding of students' mental health screening experiences. Second, the study focused only on depression, anxiety, and stress; thus, future studies may consider including other mental health indicators such as well-being, resilience, or burnout. Finally, future research may explore longitudinal designs to examine changes in students' mental health outcomes and screening preferences over time, as well as the integration of mobile screening tools with follow-up interventions and counseling services.

VI. AUTHOR'S CONTRIBUTION

Conceptualization: Arlen B .Calimag and Thelma D. Palaoag.
Methodology: Arlen B. Calimag.
Investigation: Arlen B. Calimag.
Discussion of results: Arlen B. Calimag and Thelma D. Palaoag.
Writing – Original Draft: Arlen B. Calimag.
Writing – Review and Editing: Arlen B. Calimag and Thelma D. Palaoag.
Resources: Arlen B. Calimag.
Supervision: Arlen B. Calimag, Thelma D. Palaoag.
Approval of the final text: Arlen B. Calimag and Thelma D. Palaoag.

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